

IN THE CLAIMS:

1. (original) A method for producing silicon wafers with improved surface features, comprising the steps of:

- (a) supplying a substrate fabricated substantially of silicon; and
- (b) exposing the substrate to an etching bath containing a caustic etching solution including an additive, wherein the additive is a chlorite salt, an iodate salt, or a mixture thereof.

2. (original) A method according to Claim 1, wherein the additive is potassium iodate.

3. (original) A method according to Claim 1, wherein the additive is sodium iodate.

4. (original) A method according to Claim 1, wherein the additive is a mixture of potassium iodate and sodium iodate.

5. (original) A method according to Claim 1, wherein the additive has an additive concentration of at least about 0.01% by weight.

6. (original) A method according to Claim 1, further comprising the step of forming the additive by chemical reaction in the etching bath.

7. (original) A method according to Claim 1, further comprising the step of forming the additive by a reaction in the etching bath between iodic acid and hydroxide.

8. (original) A method according to Claim 1, further comprising the step of forming the additive by an oxidation of I_2 with chlorate in the etching bath.

9. (original) A method according to Claim 1, wherein the additive is sodium chlorite.

10. (original) A method according to Claim 1, further comprising the steps of:

- (c) removing a portion of the solution from the etching bath;
- (d) exposing the portion of removed solution to the additive; and
- (e) returning the exposed portion of removed solution to the etching bath.

Please add the following new Claims:

11. (new) A method according to Claim 1, wherein the additive includes lithium iodate.

12. (new) A method according to Claim 1, wherein the additive includes an alkaline medium.

13. (new) A method according to Claim 1, further comprising the step of:

(c) replenishing the additive by adding more iodate salt as the iodate salt is depleted.

14. (new) A method according to Claim 13, wherein the additional iodate salt is selected from the group consisting of a solid, an aqueous solution and a slurry of the additional iodate salt with a suspending agent.

15. (new) A solution for use in etching silicon wafers comprising:

a caustic solution for etching crystal silicon, the caustic solution having an additive including a chlorite salt, an iodate salt, or a mixture thereof.

16. (new) A solution as recited in Claim 15, wherein the additive is potassium iodate mixed with sodium iodate.